

Special Articles and Association Notes

The Manitoba Medical Association Review

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Editor

C. W. MACCHARLES, M.D. (MAN.)

Advisory Editor

Ross B. MITCHELL, B.A., M.D., C.M. (MAN.),
F.R.C.P.(C.)

Business Manager

J. GORDON WHITLEY

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The Annual Meeting

The Annual Meeting of the Manitoba Medical Association was held this year just after the outbreak of war. With several of the visiting speakers and many of the local members either called for military duty or expecting to be called up, it was inevitable that there should be some confusion in detail and modification of the pre-arranged programme. The Executive Committee finally decided that it would be simpler to proceed with the meeting on the dates scheduled rather than to postpone the meeting. The attendance was naturally lower than last year, but it must be agreed that much useful work was done.

Several of the visiting clinicians came to the meeting at great personal inconvenience and their lectures were very much appreciated, and the thanks of the members are due to these men in a measure which goes far beyond the wording of a formal resolution of thanks.

At the Annual General Meeting the Association passed a resolution in favor of federation with the Canadian Medical Association with certain reservations. Resolution number twelve with regard to war conditions was also of great importance.

It is impossible to foresee the conditions under which another Annual Meeting of the Association may be held, but it is probable that many familiar faces will be absent.

Meeting of Executive

Summary of the Minutes of a Meeting of the Executive Committee of the Manitoba Medical Association held at the Royal Alexandra Hotel, Winnipeg, Sunday, September 10, 1939, at 8.30 p.m.

The meeting was preceded by a dinner at which the members of the Executive Committee and the Chairmen of the various Standing Committees were guests of the President, Dr. W. S. Peters.

**Hospital Aid Act and
Public Ward Patients.**

The question of changing the form of admission for public ward patients was considered, and after discussion a motion was passed referring the question for consideration to the incoming executive.

Relief Cases in Unorganized Territory.

Payment for medical services for relief cases in unorganized territory was discussed at length, and it was finally decided that it was not necessary at present to ask for any change in the basis for payment.

Record of Presidency.

A motion was passed instructing the committee to draw up a suitable certificate to be given to each President of the Association, and also a scroll with the signature of each officer of the Association.

**Medical Appeal Board of the
Workmen's Compensation Board.**

The formation of the Medical Appeal Board of the Workmen's Compensation Board was discussed at length, and it was finally decided to maintain the arrangements originally established in 1934. A motion was passed naming Dr. W. W. Musgrave as the suggested Vice-President of the Medical Appeal Board of the Workmen's Compensation Board.

**Resolution from North West District
Society Re. Health Officers.**

A resolution from the North West District Society with regard to health officers was referred back to this society for further consideration.

**Resolution from Brandon District Medical Assoc.
iation Re. Salaries to State Medical Officials.**

A resolution from the Brandon District Medical Association with regard to salaries to state medical officials was referred to the Committee on Sociology for study and report.

Committee Reports.

The reports of the various Standing Committees were read and approved.

Nominating Committee.

The Chairman appointed three Past Presidents, Dr. Geo. Clingan, Dr. H. O. McDiarmid and Dr. C. W. Burns, as a Nominating Committee, and the

report presented by the Committee was adopted by the Executive Committee.

Vacancy on Executive Arising Out of War Conditions.

A motion was passed instructing the Committee on Resolutions to bring in to the Annual Meeting a resolution giving the Executive Committee power to suspend the constitution with regard to election of officers and members of the executive as an emergency measure in order to fill any vacancies that might arise as the result of war conditions.

Members on Committees of Canadian Medical Association.

The list of representatives from Manitoba on the various Committees of the Canadian Medical Association was approved.

The meeting then adjourned.

Annual General Meeting

Summary of the Minutes of the Annual Meeting of the Manitoba Medical Association held in the Royal Alexandra Hotel, Tuesday, September 12th, 1939, at 2 p.m.

Following dinner, the President, Dr. W. S. Peters, called the meeting to order, and first asked for the report of the Nominating Committee.

As there were no nominations submitted from the floor, a motion was passed closing the list of nominations. The President then appointed two scrutineers.

Special Communication.

The President asked the Secretary to read the telegram from the President of the Canadian Medical Association, Dr. F. S. Patch, advising that on account of war conditions he was unable to attend the meeting and offering best wishes to the Association.

Presidential Address.

The Vice-President, Dr. W. E. Campbell, took the chair, and the President, Dr. W. S. Peters, delivered his Presidential address. Dr. Peters dealt with the subject "Thirty Years in Medical Practice." The address was very much appreciated.

Minutes of Last Annual Meeting.

It was moved by Dr. E. J. Skafel, seconded by Dr. C. B. Stewart: THAT the minutes of the last Annual Meeting be taken as read. —Carried.

North of 53 District Medical Society.

The President announced acceptance by the Executive Committee of the application of the North of 53 District Medical Society for affiliation with the Manitoba Medical Association.

Committee Reports.

The reports of the various Standing and Special Committees were read and their adoption being duly moved and seconded were accepted.

The respective Committee reports are inserted and form part of these minutes.

Report of Resolutions Committee.

Dr. Clingan presented the report of the Resolutions Committee:

1. BE IT RESOLVED THAT this Association in annual meeting assembled express its appreciation and thanks to the Ladies' Committee for the very interesting programme prepared for the wives of the members attending the Annual Meeting.
2. BE IT RESOLVED THAT this Association in annual meeting assembled express its thanks to the management and staff of the Royal Alexandra Hotel for their valuable services during the Annual Meeting.
3. BE IT RESOLVED THAT this Association in annual meeting assembled express its thanks to the Press of the City of Winnipeg, who have been most liberal in assisting the Association during the Annual Meeting.
4. BE IT RESOLVED THAT this Association in annual meeting assembled express its thanks to the Pine Ridge Golf Club which has been most liberal in their assistance to the Entertainment Committee during the Annual Meeting.
5. BE IT RESOLVED THAT this Association in annual meeting assembled express its thanks to the Medical College which has been most liberal in their assistance to the Association during the Annual Meeting.
6. BE IT RESOLVED THAT this Association in annual meeting assembled express its thanks to the Manitoba Club which has been most liberal in their assistance to the Association during the Annual Meeting.
7. BE IT RESOLVED THAT this Association in annual meeting assembled establish life memberships in the Manitoba Medical Association for registered practitioners who have retired from practice and have been members in good standing of the Manitoba Medical Association for ten years.
8. BE IT RESOLVED THAT this Association in annual meeting assembled express its appreciation and thanks to the Canadian Medical Association for sending a team of visiting speakers to the Annual Meeting, and for their generous assistance in the preparation of the programme.
9. BE IT RESOLVED THAT this Association in annual meeting assembled express its appreciation and thanks to the visiting speakers who have contributed so largely to the success of our meeting.
10. WHEREAS, the Manitoba Medical Association has always been desirous of co-operating to the fullest possible extent with the Canadian Medical Association, and,

WHEREAS, the Committee on Constitution and By-Laws has recommended that the Manitoba Medical Association change its relation to the Canadian Medical Association to that of a Division with certain reservations, and,

WHEREAS this recommendation has been endorsed by the Executive Committee of the Manitoba Medical Association,

THEREFORE BE IT RESOLVED, that the Manitoba Medical Association in annual meeting assembled should change its status to that of a Division of the Canadian Medical Association, provided:

- (1) THAT the Manitoba Medical Association shall retain such features of its constitution as it considers important, and,
 - (2) THAT the Manitoba Medical Association may revert to the status of a branch if it so wishes after one year's notice of such intention.
11. WHEREAS, the Manitoba Medical Association has indicated its intention to change its relation to the Canadian Medical Association to that of a Division,
- THEREFORE BE IT RESOLVED, that the Manitoba Medical Association in Annual Meeting assembled do make the following amendments to the constitution:

Article I.—Name

ADD—In case of Federation with the Canadian Medical Association the Society may be known as the Canadian Medical Association-Manitoba Division.

Article VI.—Section E

TO BE ADDED—Standing Committees to conform with the Constitution for the division of the Canadian Medical Association shall be appointed by the Executive at the Annual Meeting.

Article IX.—Executive Committee Duties

ADD—It shall name and instruct representatives of the Manitoba Medical Association on the Council, the Executive, the Nominating Committee and Standing Committees of the Canadian Medical Association, and shall receive due reports from such representatives.

In matters of importance concerning relations between the profession and the public or between organized medical bodies, the Executive Committee may ask the Advisory Council for a considered opinion upon such question.

Article VI.—Section E

The Advisory Council of the Manitoba Medical Association shall be formed as follows—the President of the Manitoba Medical Association, the President of the College of Physicians and Surgeons of Manitoba, the Deputy Minister of Public Health, the Dean of the Medical Faculty

of the University, all ex officio, and such other members as the Executive of the Manitoba Medical Association may consider necessary.

Section F.

The duty of the Advisory Council shall be to furnish the Executive when required, with the unified view of the Medical Profession of the Province.

12. WHEREAS, Canada is in a state of war; and WHEREAS, such state may continue a long time; and,

WHEREAS, it is desirable that those responsible for the conduct of national affairs should have the fullest support of the citizens of Canada; and,

WHEREAS, it is essential that provision should be made for the correlation of the medical services for the civilian population and the Medical Faculties, as well as the fighting services; and,

WHEREAS, the Canadian Medical Association, its Divisions and Branches, is well qualified to represent the expert and considered opinion of the majority of medical practitioners in Canada;

THEREFORE, be it resolved that this, the Manitoba Medical Association in Annual Meeting assembled, pledges full support to our country in whatever manner its services and those of its members can be best utilized, and to that end will co-operate with the Canadian Medical Association in any plan which may be evolved; and,

BE IT FURTHER RESOLVED, that we would urge in order to obtain the utmost in service from the medical profession, that the Dominion Government accept the services of an Advisory Board appointed by the Canadian Medical Association.

13. WHEREAS, officers and members of the Executive Committee of the Association may be called away for war duty,

THEREFORE BE IT RESOLVED that this Association in annual meeting assembled do confer upon the Executive Committee, as an emergency measure, the power to suspend the constitution insofar as it relates to the election of officers and members of the Executive, and be given the power to fill vacancies among the officers and the members of the Executive Committee.

All these resolutions 1-13 were passed.

In connection with number resolution twelve with regard to war conditions, Dr. Routley read a telegram which the Canadian Medical Association had sent to the Prime Minister, the Minister of Pensions and Minister of National Defence. He also read letter which had been sent from the Quebec Division of the Canadian Medical Association to its members, and also questionnaire in the form of a card which had been sent to all the members in Quebec.

It was moved by Dr. Geo. Clingan, seconded by Dr. C. B. Stewart: THAT a copy of resolution number twelve be sent to the Prime Minister, the Canadian Medical Association and the Press.

—Carried.

It was moved by Dr. Geo. Clingan, seconded by Dr. C. B. Stewart: THAT the Executive Committee of the Manitoba Medical Association be given power to carry out any course of action that may be decided upon in connection with resolution number twelve.

—Carried.

Report of Scrutineers.

The report of the scrutineers was then presented by Dr. Rawson and was adopted.

President.....	Dr. W. E. Campbell, Winnipeg
First Vice-President.....	Dr. A. E. Hudson, Hamiota
Second Vice-President.....	Dr. H. D. Kitchen, Winnipeg
Secretary.....	Dr. C. W. MacCharles, Winnipeg
Treasurer.....	Dr. C. E. Corrigan, Winnipeg
Winnipeg Member at Large.....	Dr. A. M. Goodwin, Wpg.
Rural Member at Large.....	Dr. F. K. Purdie, Griswold

There being no new business, the meeting then adjourned.

Reports of Committees for Annual Meeting

Report of the Committee on Constitution and By-Laws

Re. the Federation Proposal

In accord with the instructions of the executive, the resolutions provisionally recommending action by the Manitoba Medical Association with respect to the above proposal, was presented to Council at the Annual Meeting of the Canadian Medical Association in Montreal. In the presentation certain points were stressed, viz., that the Manitoba Medical Association had been from the inception of the movement, sympathetic with the aim, but that the Committee of Federation had considered that the form of organization proposed in the various amendments to the constitution of the Canadian Medical Association, failed to meet the requirements for a strong central organization, in particular such fundamental problems as the basis of representation, whether by individual membership or by organized provincial units, and also the respective fields of action to be occupied by the Canadian Medical Association and the Provincial Associations remain unanswered.

In view of the action of the other Provinces, under these circumstances, the Committee of Federation are compelled to assume that all provincial liability with respect to Federation, is conditioned by that Clause of the Constitution which states that each province shall retain complete control of its own affairs.

The Federation Proposal is thus reduced to nothing more than an undertaking to co-operate with the Canadian Medical Association which is something that it has always done in the past and may safely continue to do in the future.

It is to be added further, that the statement of the position of the Manitoba Medical Association received a sympathetic and attentive hearing from Council. The provisional resolution to join the Federation was welcomed and no objection was raised to the provisos attached to it. It was also pointed out that the Dominion Committee on Constitution and By-Laws would continue its efforts to meet the points that were raised.

F. D. MCKENTY,
Chairman, Committee on Constitution
and By-Laws.

Committee on Historical Medicine and Necrology

The President and Members of the Manitoba Medical Association.

Your Committee on Historical Medicine and Necrology begs to report as follows:

Within the year the following Manitoba physicians have passed away: Dr. G. A. Brown, Winnipeg; Dr. W. Mott, Rathwell; Dr. S. A. McKeague, Winnipeg; Dr. Wm. Chestnut, former Associate Professor of Medicine in the Faculty of Medicine; Dr. W. H. Rennie, President of the College of Physicians and Surgeons of Manitoba and former member of the Manitoba Medical Association Executive; Dr. H. H. Elliott, former Commissioner of Manitoba; Dr. R. J. Crawford, Winnipeg; Dr. L. S. Gendreau, St. Norbert; Dr. P. B. Grant, Winnipeg; Major J. A. Devine, formerly Professor of Materia Medica and Therapeutics in Manitoba Medical College; Dr. H. P. Galloway, former President of Manitoba Medical Association; Dr. Olafur Stephensen, first Icelandie doctor in Canada.

The Medical History Club held several interesting meetings during the past season.

A paper on Dr. Cheadle in Western Canada, 1862-63, was read before the section of Historical Medicine at the Annual Meeting of the Canadian Medical Association at Montreal in June.

All of which is respectfully submitted.

ROSS MITCHELL,
Chairman,
Committee on Historical Medicine
and Necrology.

The remaining committee reports will be published in the November Review.

NOTICE

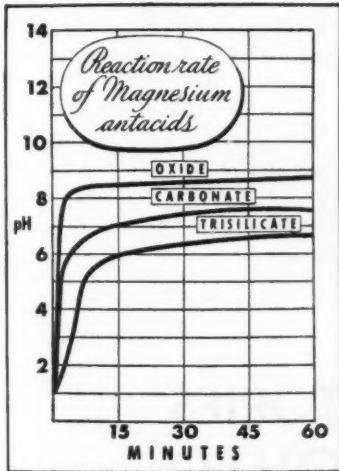
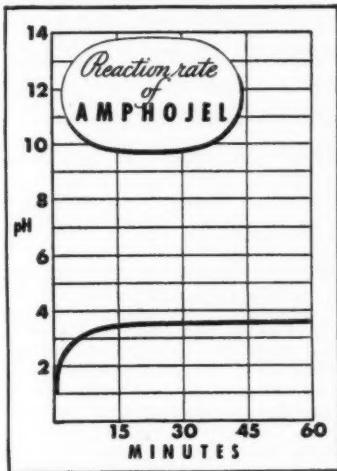
Applications are invited for the post of assistant surgeon on the honorary attending staff of St. Boniface Hospital. There are at present two vacancies. Other things being equal, preference will be given to candidates who possess a Fellowship in a Royal College of Surgeons. Applications should be forwarded to Sister Superior, St. Boniface Hospital, on or before Oct. 7th, 1939.

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Note Amphojel Chart Below

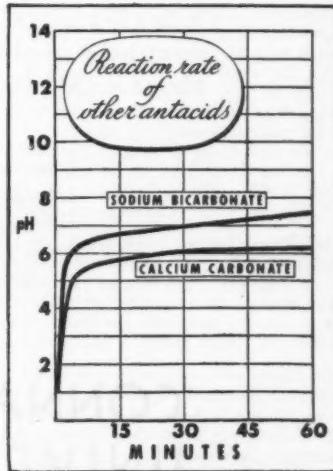


THESE charts illustrate the distinct difference between the modern aluminum hydroxide therapy for peptic ulcer and the older antacid therapies—the alkalies and alkaline earths. Amphojel, Wyeth's Alumina Gel, brings about effective and safe reduction of acidity without alkalinization.

The acidifying effect of the chyme, after Amphojel, remains unchanged, so that duodenal alkalinity is reduced in a normal manner. This is true only for the antacid compounds of alumina and does not apply to any of the preparations of magnesium, calcium or sodium.

The three charts show the effect of various antacids on pH when they react in twice the theoretical amount upon N/10 HCl at 37° C.

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* * Epinephrine in Oil (1:500) is supplied as a sterile mixture of purified epinephrine and vegetable oil. This mixture, when brought into uniform suspension, contains 2 mg. of epinephrine per cc. When injected in this form, epinephrine is absorbed slowly with the result that its action is correspondingly slow in onset and prolonged in duration.

* * In use of epinephrine suspended in oil it is possible to give a relatively large dose showing beneficial effects equivalent to those of repeated smaller doses of aqueous preparations of this active principle. It is obvious, therefore, that when extended action of epinephrine is desired the relatively prolonged relief which follows injection of Epinephrine in Oil is distinctly advantageous.

Epinephrine in Oil (1:500) is available from the Connaught Laboratories in 20-cc. rubber-stoppered vials. Prices and information relating to this preparation and to other epinephrine preparations — Epinephrine Hydrochloride Solution (1:1000) and Epinephrine Hydrochloride Inhalant (1:100) — will be supplied gladly upon request.

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NEWS ITEMS

THE PREVENTION OF SKIN DISEASES IN CHILDREN: The following is the second article on this subject prepared by Dr. George Clinton Andrews, Associate Professor of Dermatology, College of Physicians and Surgeons, Columbia University, New York. The first article was published under this column in the September 1939 edition:—

"Acne and seborrhoeic dermatitis are connected with the general health and basically are probably influenced in a large measure by the activity of the pituitary gland, which is particularly pronounced during puberty. Seborrhoea of the scalp undoubtedly contributes to the development of acne lesions on the face, and it is believed by many that the micro-organism associated with seborrhoea is identical with the acne bacillus. For these reasons one of the first steps in the prevention of acne is the institution of proper scalp hygiene. Diet also seems to influence the incidence and course of both acne and seborrhoeic dermatitis. Low-fat and low-carbohydrate diets are advisable in both of these conditions. Of course, constipation is an important factor and should be avoided.

"In acne the prevention of disfiguring pits and keloids is important and requires early treatment, especially of the indurated type characterized by numerous comedones, deep seated pustules and an oily, sallow skin. X-ray therapy is the most reliable method of halting the progress of severe acne. It is inadvisable to use x-ray, however, in patients under sixteen years of age since the endocrine overactivity preceding this age will continue to contribute to the hyperactivity of the sebaceous glands with accompanying comedone and pustule formation. In these earlier years one should depend more on local treatment with astringent lotions such as lotio alba, careful removal of comedones, drainage of pustules and frequent exposures to the ultraviolet rays. The latter may be given in gradually increasing dosage, preferably to the point of producing repeated, mild exfoliation of the skin.

"Treatment of all forms of dandruff is also the first step in prevention of a spread of seborrhoeic dermatitis to the face, chest and back. Daily application of a tonic, such as the following, serves to lessen the dandruff and keep the scalp clean, and in addition an oil should be used the night before shampoo, or even oftener if the scalp is excessively dry:

R	Liquor carbonis detergens	3	ii
	Hydrgar chloridi corrosive	gr	iv
	Propyl alcohol qsad	3	viii
R	Acid salicylic	3	i
	Ol ricini	3	i
	Ol olivae qsad	3	iv

"To prevent dermatophytosis and ringworm of the scalp one must be cognizant of the multiple sources from which the child may acquire fungi. Tinea of the scalp is usually contracted from another infected child or from household pets, especially cats and dogs. Careful isolation of cases should be enforced. Obviously the child with tinea capitis should not attend school, and at home careful supervision should be enjoined. Other children in the family must be warned against wearing the patient's hats or using combs, brushes and other articles likely to transmit the fungus. Hats made of ordinary paper bags serve well since they can be renewed frequently and the contaminated ones burned. At the first sign of tinea capitis in a home an effort should be made to ferret out the source of the infection. Animal pets must be examined carefully for patchy alopecia or eczematoid eruptions and removed from the home before other children of family are infected.

"Dermatophytosis of the feet is commonly neglected until a severe vesiculo-pustular eruption brings the patient to the physician. Prolonged involvement of the toe webs and soles may result in allergic reactions to the fungus products manifested by dermatophytides or vesiculo-pustular and squamous eruptions on the fingers and elsewhere on the body surface. Diligent treatment at the first sign of infection on the toe webs or soles will prevent these allergic reactions as well as much suffering and spread of the infection to others. A neglected infection on the toe webs will eventually lead to most recalcitrant infection of the fingernails through scratching. Early lesions are usually mild and respond well to daily applications of Whitfield's ointment. The toes must be thoroughly dried after the bath and during the day a dusting powder freely applied will retard growth of the fungus. Children with dermatophytosis should be excluded from gymnasiums and swimming pools. The use of paper or individual slippers in gymnasiums and swimming pools is worthwhile. All towels, bathing suits, etc., should be thoroughly boiled and steamed for fully thirty minutes at 100 C. Stockings should be soaked in 1:1000 solution of bichloride of mercury for twelve hours and carefully rinsed before drying.

"Oftentimes pityriasis versicolor lesions if untreated will upon exposure to the sun give rise to white spots which will stand out in marked contrast to the tanned, normal skin. This failure of the skin to pigment in the lesions is attributed to filtration of ultraviolet rays by the fungus. Such a persistent, unsightly, mottled appearance may be prevented by early diagnosis and treatment of the brown scaly macules of varying size usually distributed over the trunk. The disease is easily cured with a saturated solution of sodium thiosulphate applied night and morning for ten to fourteen days.

"Yeast organisms are prone to flourish on moist, apposed surfaces. Neglect of cleanliness in these areas accounts for ringworm infections of the groin and some cases of intertrigo of the intergluteal, inguinal and axillary regions. The perineal region must be thoroughly dried after bathing and covered with talcum powder. Intertrigo in infants requires further preventive measures. After washing with soap and water the diapers must be soaked in a 1:1000 solution of bichloride of mercury for several hours. They are then dried and used without ironing.

"Scabies may be mentioned only to emphasize its contagious nature and the importance of isolating cases from other children in the household. Though it is often difficult to prevent contagion in the home one should insist on other members sleeping apart from the infected child, and avoiding contact where possible.

"Internal causes of which the chief ones are metabolic disturbances are important in the development of disorders of the skin. However, the kind of lesion and its severity do not indicate the extent of the metabolic disturbance connected with it. In seborrhoeic dermatitis, acne vulgaris, and some cases of eczema there is a tendency to intestinal fermentation or putrefaction. Inability to digest carbohydrates or certain foods, or excessive intake of these, hyperacidity of the urine, constipation, low metabolic rate, and many other internal disorders should be corrected in order to prevent the development of furunculosis, folliculitis, pruritus, acne and eczema. Endocrine disorders likewise influence the incidence of dermatoses, and in children subject to xerosis and keratosis pilaris the cure and the prevention of recurrences is accomplished by the correction of disturbances of the function of the thyroid and other glands that may be present. Hypersensitivity or allergy to certain foodstuffs may be responsible for the development of infantile eczema.

Recognition of this may lead to a cure of the disease and to the prevention of its recurrences. The offending foodstuffs in children are usually those which are encountered early in infancy. These are milk, wheat, eggs, orange juice and fish (cod liver oil). Whereas intradermal tests with these substances may shed some light upon specific foods causing the eczema, results of such tests are often inconclusive or disappointing, and elimination by the 'trial and error' method is of greater practical value. Besides these substances, other foods and also contact substances and inhalants may be the causes of allergic eczema. Sensitivity to silk and orris root are not uncommon. In these cases there is an intense pruritus which is generally localized at the bends of the elbows, the popliteal spaces, and the sides of the neck. The skin changes consist of erythema, vasculation and a leathery thickening and excoriations caused by rubbing and scratching. The skin is the shock tissue in which a hypersensitivity exists to articles of silk inhaled by the patient. This type of eczema, due to inhalants, resembles that due to foods and both can be prevented by an early recognition of the allergic problem involved and the institution of appropriate measures.

"The prevention of congenital syphilis can be so efficiently accomplished by ante-natal treatment that it deserves special emphasis. Every pregnant woman should have a Wasserman and Kahn test and a careful physical examination. If there is any suspicion of syphilis the serology tests should be repeated and if doubt still exists the spinal fluid should be examined or a provocative Wasserman test should be made. If the diagnosis of syphilis in the mother is established before the birth of the child energetic anti-syphilitic treatment should be given. This should consist of alternating courses of arsphenamine and bismuth with particular emphasis being placed upon the treatment during the 5th month of pregnancy. Treatment should be continuous and in doses appropriate to body weight, a pregnant woman receiving as much as one who is not pregnant but of the same body weight. The consensus of opinion is that infection of the foetus probably does not occur until about the 5th month of pregnancy, and then probably because of a regeneralization of the infective agent in the maternal blood stream. Treatment of the syphilitic pregnant mother may, therefore, be directed either towards the prevention of infection of the foetus prior to the 5th month of pregnancy or, if treatment is started after the 5th month, towards the actual early treatment of an already existing syphilitic infection in the foetus. Without anti-syphilitic treatment there is strong likelihood that a syphilitic infant will be born but with proper anti-syphilitic treatment begun early and carried throughout the pregnancy the outlook is completely reversed and there is great probability that a normal living child will be born. According to Moore the results of ante-natal syphilitic treatment are as follows:

Treatment of Syphilitic Mother	Number of Cases	Percentage of Syphilitic Children
None	201	96.5
Mercury before, none during pregnancy	87	89.6
Arsphenamine before, none during pregnancy	15	80.0
Mercury during pregnancy	111	72.0
Arsphenamine before, mercury during pregnancy	26	26.9
Arsphenamine during pregnancy	98	19.3
Arsphenamine before and during pregnancy	7	14.2"

COMMUNICABLE DISEASES REPORTED Urban and Rural - August 13th to September 9th, 1939.

Tuberculosis: Total 54—Winnipeg 13, Unorganized 8, Kildonan East 3, Rosedale 2, Shell River 2, Bifrost 1,

Brandon 1, Brooklands 1, Cartier 1, Clanwilliam 1, Cypress North 1, Dauphin Rural 1, De Salaberry 1, Hanover 1, Kildonan West 1, Lac du Bonnet 1, Lansdowne 1, Lawrence 1, Montcalm 1, Morton 1, Neepawa Town 1, Odanah 1, Portage Rural 1, Rockwood 1, Rossburn 1, Russell 1, St. James 1, St. Vital 1, Silver Creek 1, Transcona 1, Whitehead 1.

Whooping Cough: Total 50—Winnipeg 26, Kildonan East 5, St. Boniface 5, St. Vital 5, Flin Flon 2, Minnedosa 1, Unorganized 1 (Late Reported: Roblin Rural 3, Brandon 1, St. Vital 1).

Measles: Total 44—Winnipeg 16, Unorganized 14, Brenda 2, Minitonas 2, Norfolk North 2, Riverside 2, Brandon 1, Lawrence 1, Swan River Rural 1 (Late Reported: Brenda 3).

Scarlet Fever: Total 35—Winnipeg 20, St. Clements 4, Killarney 2, St. Boniface 2, St. Vital 2, Morris Town 1, Pembina 1 (Late Reported: Roblin Rural 2, Turtle Mountain 1).

Chickenpox: Total 26—Flin Flon 6, Winnipeg 6, Minto 2, Portage City 1, St. James 1 (Late Reported: Flin Flon 10).

Mumps: Total 14—Winnipeg 10, Hanover 1, Kildonan East 1, Transcona 1, Unorganized 1.

Typhoid Fever: Total 12—Unorganized 5, The Pas 2, Rhineland 1, Rosser 1, Shell River 1, Winnipeg 1 (Late Reported: The Pas 1).

Diphtheria Carriers: Total 11—St. Clements 5, Winnipeg 5, Franklin 1.

Diphtheria: Total 10—Winnipeg 6, Stanley 2, Brooklands 1, St. Paul West 1.

Anterior Poliomyelitis: Total 9—Winnipeg 4, Fort Garry 1, Franklin 1, Rivers Town 1 (Late Reported: Selkirk 1, Winnipeg 1).

Lobar Pneumonia: Total 8—(Late Reported: De Salaberry 1, Hillsburg 1, Killarney 1, Minita 1, Rockwood 1, Rosedale 1, Unorganized 1, Woodworth 1).

Erysipelas: Total 4—Winnipeg 3, Unorganized 1.

Influenza: Total 1—(Late Reported: Unorganized 1).

Septic Sore Throat: Total 1—St. Boniface 1.

Venereal Disease: Total 126—Gonorrhoea 84, Syphilis 42 (month of August).

DEATHS FROM ALL CAUSES IN MANITOBA For the Month of July, 1939.

URBAN—Cancer 24, Tuberculosis 7, Pneumonia (other forms) 3, Syphilis 3, Pneumonia (Lobar) 2, Septic Sore Throat 1, Tetanus 1, all others under 1 year 22, all other causes 162, Stillbirths 13. Total 238.

RURAL—Cancer 29, Tuberculosis 14, Pneumonia (other forms) 11, Pneumonia (Lobar) 6, Influenza 2, Diphtheria 1, Erysipelas 1, Whooping Cough 1, all others under 1 year 34, all other causes 147, Stillbirths 8. Total 254.

INDIAN—Tuberculosis 11, Pneumonia (other forms) 4, Influenza 2, Whooping Cough 2, all others under 1 year 4, all other causes 7, Stillbirths 0. Total 30.

Bismarck, N.D.: North Dakota's socialized medicine experiment, administered by the Farm Security Administration, ended July first, termed a failure. Walter Maddock, state FSA director and president of the Farmers' Mutual Aid Corporation, said the plan broke down because doctors were dissatisfied with the low pay.

—Saturday Post, September 30th, 1939.

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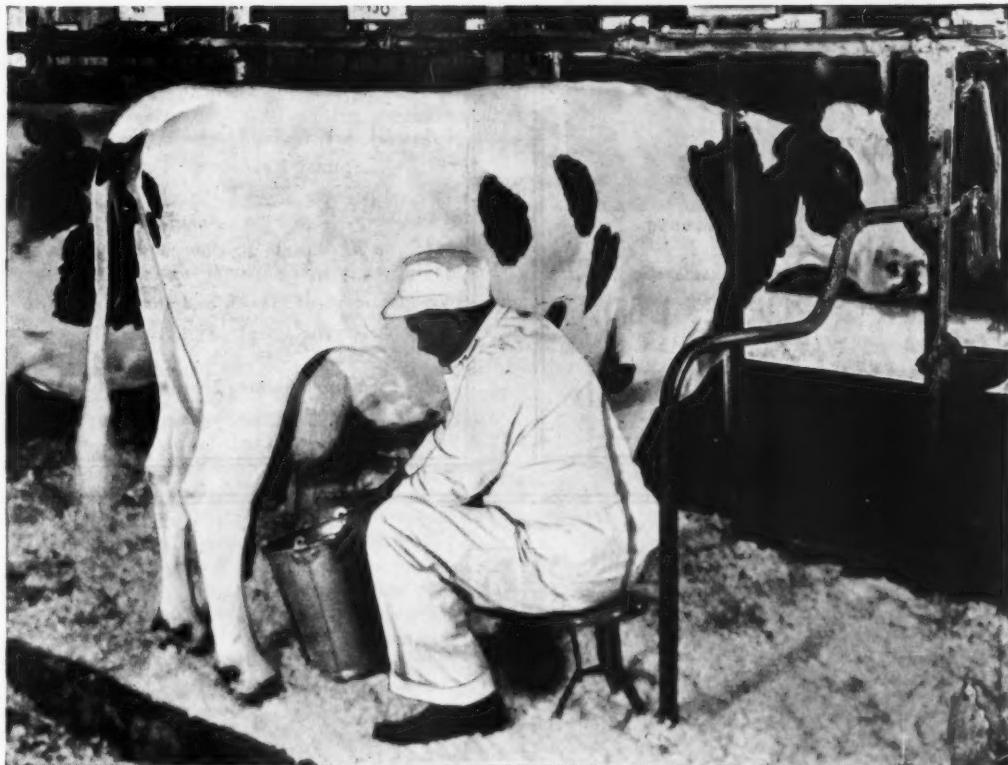
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Clinical Section

Leucorrhœa: Its Diagnosis and Treatment*

by

BRIAN D. BEST, M.D. (Man.), F.R.C.S. (Edin.)

Demonstrator in Obstetrics and Gynaecology

University of Manitoba

Assistant Gynaecologist, Winnipeg General Hospital

Leucorrhœa is here used in a broad sense to include all cases of excessive and / or abnormal vaginal discharge, exclusive of blood, urine, or faeces. Its restricted meaning, of course, applies only to a white discharge popularly known to women as "the whites" and which represents merely an excess of the normal cervico-vaginal secretions.

Leucorrhœa is one of the commonest and most troublesome complaints observed in general and in gynaecological practice. In addition, it resembles in its amenability to treatment, diseases of the skin, it is either easily curable or apparently permanently incurable. However, too often leucorrhœas are treated in a routine or haphazard fashion, without regard to the underlying aetiology and pathology, and it is no wonder that results are frequently unsatisfactory. The key to treatment, as in most disease processes, lies in the accurate detection of the origin or source of the flow. In the second place, leucorrhœa has been accorded an apathy by the profession second only to the common cold. How commonly a patient will say she has had a discharge for years but that a doctor on being consulted about it, has quickly dismissed the subject with a cursory "Oh! a discharge is nothing!" "It won't do any harm" or "it is natural for women who have borne children, etc." If only those same doctors could be made to suffer from an irritating urethral discharge for months!

Under normal conditions in the healthy woman, secretion is produced by the cervix and vagina, and to a smaller extent by the endometrium, Bartholin's, and other vulvar glands; but a balance is so established between formation and evaporation that the surfaces are kept just moist and clothing is not stained. Exceptions to this rule may occur just before and just after a menstrual period, and again during sexual excitement, but at all other times the external vulvar and perineal surfaces should be dry. The woman who is compelled to wear a pad for protection between periods certainly has a pathological discharge; so also is one who complains perhaps of only slight staining but of definite irritation of the skin. In cases of moderate and marked perineal and levator relaxation with the associated eversion of the vaginal walls some secretion will of necessity be brought to the surface and such patients may

complain of excessive discharge when, in truth, it is only the outward projection of the normally existing vaginal moisture. In these, pessary or repair will cure their so-called "leucorrhœa" providing no associated lesions are present.

Classification

The following, I believe, affords a fairly practical classification of the causes of leucorrhœa, particularly from the viewpoint of diagnosis:

(a) *Constitutional, Systemic and Endocrine Causes.*

1. *Excess of normal secretions.*

- (a) Pelvic congestion.
- (b) Abnormal sex life.
- (c) Hyperestrinism.

2. *Abnormal Discharge.*

- (a) General ill health—Anaemia.
Constipation.
Malnutrition.
Tuberculosis.

(b) *Diabetes Mellitus.*

(c) *Local Causes.*

1. *Excessive normal secretion.*

- (a) Prolapse, cystocele, etc.
- (b) Granulosa cell tumour, etc

2. *Abnormal Discharge.*

- (a) Endocervicitis.
Acute (gonorrhœa).
Chronic (puerperal).
(gonorrhœal).

(b) *Vaginitis:*

- 1. Bacterial—cocc., B. coli,
diphth., etc.
- 2. Chemical—douches.
- 3. Trichomoniasis — Trich.
vaginalis.
- 4. Moniliasis—thrush.
- 5. Mechanical—foreign bodies.

- (c) *Neoplasms—Benign (polyps).
(fibroids).*

Malignant.
(Carcinoma of cervix and body).
(Sarcoma).

(d) *Postmenopausal.*

- (senile vaginitis).
(pyometra).

Physiology

In order to obtain a better understanding of the pathology of vaginal discharge I propose briefly to review the present knowledge regarding the physiology of secretion from the lower genital tract.

You will recall that the vagina is lined and the cervix is covered with a modified skin or stratified squamous epithelium. Normally, these cells, con-

* Paper read at a meeting of the Winnipeg Medical Society, October 20th, 1939.

taining glycogen, are being constantly desquamated and under the influence of the vaginal lactobacilli (of Doderlein) yield lactic and other organic acids. This acid medium is inimical to the growth of all organisms, except the yeasts and the normal flora, and constitutes nature's first line of defence against bacterial invasion. It is customary to measure acidity and alkalinity in terms of pH (neutrality=7, acidity=below 7, alkalinity=above 7). The normal vaginal reaction thus stated is pH 4 to 4.5, i.e., moderately acid. The pH can be quickly determined with the use of Squibb's Nitrazine Test papers and a standard color chart.

The stratification of the vaginal cells and the deposition of glycogen therein is initiated and controlled by the hormone, oestrin, produced in the follicles of the ovaries. Before puberty and after the menopause oestrogen is absent in the circulating blood, hence the vaginal mucosa is thin, lacks glycogen and is unable to provide an acid producing medium. In consequence bacterial invasion and vaginitis readily occur at these age periods (spec. fevers in children, senile vaginitis). The new-born female infant carries over enough of its mother's oestrin to maintain a thick lining and an acid vagina for about two weeks and so resists early neonatal vaginal infection. During the childbearing period the mucosa is thick, rich in glycogen, and vaginal pH is maintained at about 4 to 4.5, a reaction at which pathogens succumb. Were it not for coitus, pregnancy and labour, menstruation, etc., such a pH would be constant; unfortunately such is not the case.

The normal secretion from the cervix is a clear, viscid, alkaline fluid (pH 7.5). Infection in the cervix will increase the flow of this alkaline medium and tend to raise vaginal pH. Consequently bacteria can flourish in vagina and vaginitis may become associated with the endocervicitis. The squamous cells become macerated and quickly peel off in an alkaline medium and are replaced by a single layer of columnar cells which as we have seen are normally exposed to a pH of at least 7.5 (in the cervix). The loss of the opaque squamous covering and its replacement by a thin layer produces the so-called *erosion* around the external os. Such a lesion per se is of no significance—it merely indicates an excessive alkaline cervical flow or a lessened acidity in vaginal vault. The normal vaginal secretion is not produced by glands, as they are absent from the vagina, but on the contrary represents shed squamous epithelium and bacteria. It is a thick, crumbling white material and on mixing with the clear cervical flow, produces the familiar curdy, acid substance normally found in the vaginal vault of healthy women.

Investigation

Now, let us turn to abnormal types of discharge. As to color—white means slight or no infection, to yellow or green which suggests pus and infection; consistency—thin suggests vaginitis, thick,ropy or stringy suggests endocervicitis; skin irri-

tation—vaginitis, none=endocervicitis; odor—mucoid none, purulent=offensive (of endocervicitis and vaginitis).

In the investigation of a case, all these physical properties should be noted, as they assist in the diagnosis. The pH of the discharge is tested, smears taken from urethra and cervix, and a hanging-drop of freshly diluted, warm discharge is taken. If uncertain as to the origin—cervical or vaginal—of the flow, Schultze's Tampon Test may be done:—dry mop vagina, insert a dry tampon against cervix and emamine in a few hours. If cervical, the upper surface will be saturated and none will appear at vulva. I cannot emphasize enough the importance of accurately locating the source and aetiology of discharge in each case if treatment is to be successful. A careful bimanual pelvic and a specular examination are routine. Sudden onset of a leucorrhoea suggests acute gonorrhoea or a fistula; nearly all other types are of more gradual onset.

Clinical Types

The first clinical type I shall mention is of relatively frequent occurrence. The patient is commonly a young unmarried woman who complains of a constant, non-irritating, white discharge, worse pre and postmenstrually and often requiring a pad. She is of the hypersensitive type, may fear gonorrhoea or dread offending socially. This psychological factor aggravates the condition and a vicious circle is set up. These patients are usually engaged in sedentary occupations which favor constipation and pelvic engorgement, and unnatural, excessive or unsatisfied sex life adds to the disturbance. Examination reveals a normal pelvis and an excess of the normal vaginal secretion—microscopic examination shows only squamous cells, thick bacilli, few or no pus cells and pH is 4. Reassurance, readjustment of living regime, avoidance of local treatment generally suffice. In a few a desiccating powder applied to vulva to absorb discharge may be necessary at first.

I have already referred to the parous woman with cystocele, etc., and will not mention this type further.

The next class constitutes a large, somewhat ill-defined group of women who are below par physically, tire easily, work too hard, are thin, anaemic, and constipated. They complain of frequent head colds and of a thin, irritating, purulent leucorrhoea, which may or may not contain the Trichomonas. These people lack vaginal glycogen and have low blood oestrin (often scanty or infrequent periods), and thus the local defense v.s. non-specific bacteria is removed and a low grade vaginitis set up. Attention to general health, correction of the anaemia, etc., together with trichomoniasis injections and suppositories, B-lactose capsules and acid douches will take care of most of these cases.

Another type is the woman who douches too often or uses strong antiseptics and deodorants (a chemical, later a bacterial vaginitis). Simple

abstention from the douche often produces marvellous results.

Diabetics are very susceptible to vaginitis, especially Trichomonas, thrush, and a non-specific type. Anti-diabetic regime plus local treatment is necessary to effect a cure, and these are often persistent cases. Pruritus may overshadow discharge as a symptom.

However, most leucorrhoeas are the result of purely local lesions, and of these, *chronic infection of the cervix* is by far the most common and important. In the majority it is the result of the trauma of labor or abortion or of gonorrhoea. The discharge is mucoid, or mucopurulent, thick, stringy orropy, and not very irritating. It varies from yellowish white to green in color. Specular examination reveals usually an old lacerated cervix, eversion of lips, and an erosion. As the infection spreads, the whole cervix becomes enlarged, irregular and firm (cervicitis). Most parous women have or have had such a discharge to some extent, but have resigned themselves to it believing it to be the universal lot of the child-bearing woman. The treatment in mild and moderate cases is linear cauterization with the fine wire (nasal tip) cautery after thorough removal of mucus and discharge. This can be done in the office and may need to be repeated in a month or six weeks (give technique). More advanced cases require Hyam's conization or a Sturmdorff amputation. The majority of obstetricians today examine their puerperal patients 4 to 6 weeks post partum and if even a slight endocervicitis (and erosion) is present lightly cauterize the cervix. By so doing troublesome discharge, dating from the birth of a child, can be almost eliminated. At the same time the restoration of the cervix to a healthy state reduces the future hazard of carcinoma, and perhaps, of only slightly less importance, chronic pelvic pain and focal infection.

Next in frequency as a cause of chronic leucorrhoea is *Trichomonas vaginalis vaginitis*. The discharge is thin, purulent, greenish-yellow, irritating, profuse, often foamy, and offensive. In acute cases there may be severe pruritus vulvae, widespread erythema of perineum and thighs, soreness, dyspareunia, insomnia and depression, even suicide. In this discharge is regularly found the *Trichomonas vaginalis*, an organism 2 or 3 times the size of a pus cell, round or spindle shaped, actively motile and flagellated, together with many pus cells. Some question the aetiological importance of this organism, ascribing the infection to a specific streptococcus. The matter is not yet settled, but in practice finding a discharge teeming with *Trichomonas vaginalis* clinches the diagnosis, and improvement or cure is associated with their diminution or disappearance. One or two Trich. in a field have little significance. Examination reveals abundant discharge, irritation of skin, and redness of vestibule. Bulk of discharge is found in the vaginal vault, walls of the latter and the surface of cervix being spotted with peculiar small red blotches (strawberry appearance). The

urethra and endocervix in a typical uncomplicated case show no evidence of infection. PH is 5 to 7, depending on acuteness of infection. Organisms are readily found in a hanging drop preparation, their characteristic jerky motility being diagnostic.

There are many drugs and techniques. Acid douches, B-lactose and boric acid capsules, Devegan, Aldarsons, silver pieratol are all used. Treatment must be prolonged. I have been able to diagnose Trich. vaginitis in 80 to 90% of cases clinically and have confirmed it by microscope.

The appearance in acute and subacute gonorrhoea affecting the lower genital tract is familiar to all. By careful examination it should always be possible to differentiate it from Trich. vaginitis, yet I know the two are frequently confused. Many a woman in the past has been unjustly condemned as having gonorrhoea when in truth she had an innocent Trich. vaginitis. And at present, largely as a result of injudicious drug advertising, many with gonorrhoea are diagnosed and treated as cases of Trich. infection. However, the two diseases may well be associated in any case, thus emphasizing the importance of routine g.c. smears in every case of leucorrhoea. In acute g.c. endocervicitis the discharge is a thick, creamy or muco-purulent, greenish-yellow exudate, which can in most cases be expressed also from urethra and which reveals typical organisms on staining properly taken smears. Sudden onset of a discharge with burning and dysuria a few days after a suspicious exposure overwhelmingly favors g.c. Trich. vaginitis is of gradual onset and in only the very severe cases are there urinary symptoms.

Chronic gonococcal infection of cervix is clinically, and all too often bacteriologically indistinguishable from simple, non-specific endocervicitis. Repeated smears and provocative applications may reveal the conococci.

The next group comprises patients suffering from benign and malignant neoplasms. Although in most of these bleeding or some other symptom overshadows leucorrhoea, there are certain characteristic types of discharge found. Cervical and endometrial polyps tend to aggravate the normal pre- and post-menstrual leucorrhoea, and in cervical polyps the discharge is often of a peculiar mucilage-like character. Endometrial hyperplasia and polypi and submucous fibroids may produce a thin, watery discharge. Sloughing fibroids and infected retained products of conception give a very offensive purulent flow from the external os. In carcinoma of the uterus the discharge is at first clear and watery, later blood-stained, and finally very foul and with the appearance of dirty dishwater.

Post-menopausal leucorrhoea may result from Trich. or thrush, but generally is the sign of a (1) senile vaginitis or (2) pyometra. In post-menopausal vaginitis the mucosa is thin and atrophic, breaks and bleeds readily, and adhesions finally form. The condition is due to absence of normal oestrin-glycogen—lactic acid change, and

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hence organisms from bowel, etc., thrive without harm. These cases with a thin, purulent, often bloody discharge yield to oestrogenic therapy—orally, locally, and intramuscularly. This thickens the mucosa, restores glycogen, lowers pH and destroys bacteria. B-lactose capsules are useful here.

Pyometra generally means an associated carcinoma of body or cervix, but in past year I have seen three or four cases resulting from retention of secretion behind a cervical stricture, the result of post-menopausal atrophy and narrowing of cervical canal. Curettage revealed no tissue. Dilatation and a few days' drainage via hard rubber tube sufficed to cure them.

I have referred already to *Thrush Vaginitis*. This type is due to infection with monilia or yeast-like organisms and is seen especially during pregnancy and in diabetics. The vagina is covered with thick, milk - white, semi - solid masses which adhere to walls and on removal leave an angry dark red base. Pruritus may overshadow the complaint of discharge. Stain smear with carbol fuchsin—reveals mycelial threads with budding. The vaginal pH is below 4, the only infection in which acidity is increased. Soda bicarb. douches and painting walls daily with 1% aqueous gentian violet is specific.

Finally, are those cases of leucorrhœa due to the mechanical irritation of *foreign bodies*—neglected pessaries in old women, of contraceptive apparatus in younger women, and more recently a peculiar brownish leucorrhœa following the use of Tampax. Time forbids mention of vulvovaginitis in children which is now being satisfactorily treated by local application of oestrogenic preparations.

In conclusion, I must remind you that I have been able to review rather sketchily only the commoner types of vaginal discharge met with in practice. I trust however, that this presentation may stimulate some of you to take up the subject yourselves and perhaps it will help others to a better understanding of the logical treatment of this rather unromantic symptom.

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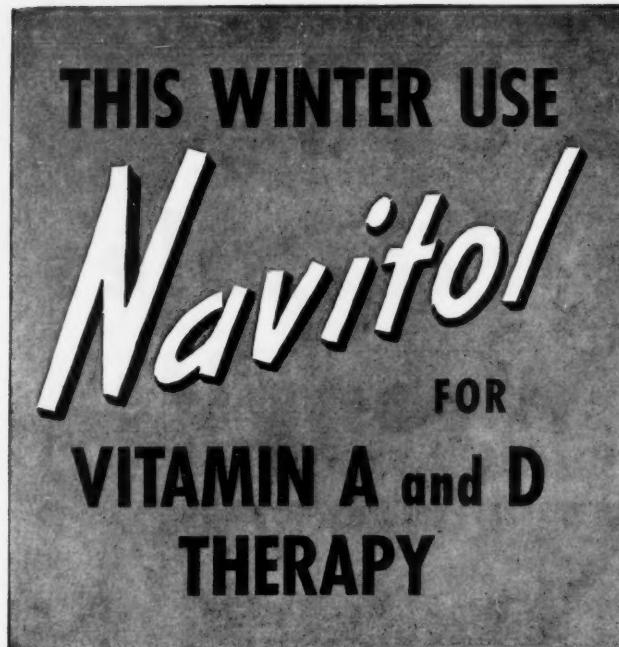


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